

IN THE CLAIMS

Please amend the claims as follows:

Claim 1-19 (canceled)

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Claim 20 (currently amended): An information recording method using an information medium for recording stream data of MPEG-TS in accordance with a data structure using transport stream packets and data units, the information medium including:

- a data area ~~for recording~~ configured to store object data of the stream data using the transport stream packets, one of the data units being larger than one of the transport stream packets, and
- a management area ~~for recording~~ configured to store management information of the object data, wherein,
 - ~~the data structure organizes the object data as one or more of the data units included in the stream data, each one of the data units including the transport stream packets and information indicating an arrival time of a first packet of one of the data units~~
 - said management information includes stream object information for managing the object data, and
 - said stream object information includes an area configured to store bits of a copy generation management system,

said method comprising:

- receiving the stream data; and
- recording the received stream data on the information medium in accordance with the data structure.

Claim 21 (previously presented): A method according to Claim 20, further comprising:

recording, in the management area, at least a time difference value corresponding to a difference between a first time stamp recorded in a first data unit and a second time stamp recorded in a second data unit, said first and second data units being included in the plurality of said data units.

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Claim 22 (previously presented): A method according to Claim 21, further comprising:

determining the time difference value by rounding to a predetermined number of effective digits a difference between a time information value corresponding to the second time stamp and a time information value corresponding to the first time stamp.

Claim 23 (previously presented): A method according to Claim 21, further comprising:

computing the time difference value using a value of the first time stamp recorded in a first one of the data packets located in each of the data units.

Claim 24 (previously presented): A method according to claim 21, further comprising:

recording a time stamp in one of the data packets at an end of a last one of the data units included in the stream data indicating an arrival time of a last one of the data packets in the last one of the data units; and

computing the time difference value using the arrival time of the last one of the data packets.

Claim 25 (currently amended): An information medium for recording stream data of MPEG-TS in accordance with a data structure using transport stream packets and data units, comprising:

a data area ~~for recording~~ configured to store object data of the stream data using the transport stream packets, one of the data units being larger than one of the transport stream packets; and

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a management area ~~for recording~~ configured to store management information of the object data, wherein,

~~the data structure organizes the object data as one or more of the data units included in the stream data, each one of the data units including the transport stream packets and information indicating an arrival time of a first packet of one of the data units~~

said management information includes stream object information for managing the object data, and

said stream object information includes an area configured to store bits of a copy generation management system.

Claim 26 (currently amended): A ~~memory~~ medium according to claim 25, wherein a time difference value corresponding to a difference between a first time stamp recorded in a first data unit and a second time stamp recorded in a second data unit is recorded in the management area, said first and second data units being included in said plurality of data units.

Claim 27 (currently amended): A ~~memory~~ medium according to claim 26, wherein the time difference value is determined by rounding to a predetermined number of effective digits a difference between a time information value corresponding to the second time stamp and a time information value corresponding to the first time stamp.

Claim 28 (currently amended): A ~~memory~~ medium according to claim 26, wherein a value of the first time stamp recorded in a first one of the one or more data packets in the first data unit is used to compute the time difference value.

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Claim 29 (currently amended): A ~~memory~~ medium according to claim 26, wherein a time stamp recorded in one of the one or more data packets at an end of a last one of the plurality of data units included in the stream data indicates an arrival time of a last one of the one or more data packets in the last one of the plurality of data units, and the arrival time of the last one of the one or more data packets is used to compute the time difference value.

Claim 30 (currently amended): An information recording apparatus using an information medium for recording stream data of MPEG-TS in accordance with a data structure using transport stream packets and data units, the information medium including:

a data area ~~for recording~~ configured to store object data of the stream data using the transport stream packets, one of the data units being larger than one of the transport stream packets, and

a management area ~~for recording~~ configured to store management information of the object data, wherein,

~~the data structure organizes the object data as one or more of the data units included in the stream data, each one of the data units including the transport stream packets and information indicating an arrival time of a first packet of one of the data units~~

said management information includes stream object information for managing the object data, and

said stream object information includes an area configured to store bits of a copy generation management system,

said apparatus comprising:

a receiver block configured to receive the stream data; and

a recorder block configured to record the stream data received by said receiver block on the information medium in accordance to the data structure.

Claim 31 (currently amended): An information reproducing apparatus using an information medium for recording stream data of MPEG-TS in accordance with a data structure using transport stream packets and data units, the information medium including:

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a data area ~~for recording~~ including object data of the stream data using the transport stream packets, one of the data units being larger than one of the transport stream packets, and

a management area ~~for recording~~ including management information of the object data, wherein,

~~the data structure organizes the object data as one or more of the data units included in the stream data, each one of the data units including the transport stream packets and information indicating an arrival time of a first packet of one of the data units~~

said management information includes stream object information for managing the object data, and

said stream object information includes an area configured to store bits of a copy generation management system,

said apparatus comprising:

a reproducer block configured to reproduce the stream data with said data structure from the information medium; and

a decoder block configured to decode the stream data reproduced by said reproducer block.